

REMARKS/ARGUMENTS

With this Amendment, Applicant amends claims 1 and 15. No new matter is added. Therefore, claims 1-20 are all the claims currently pending in the application. Based on the following remarks, Applicant requests reconsideration of the application and allowance of the claims.

I. Rejection of Claims 1, 2, 4, 6 and 14-18 Under 35 U.S.C. § 102(a)

Claims 1, 2, 4, 6 and 14-18 stand rejected under 35 U.S.C. § 102(a) as being allegedly anticipated by Varshney et al. (U.S. Publication No. 2003/0072283; hereinafter “Varshney”).

Claim 1, requires, *inter alia*, a “system having an apparatus comprising: an *encoder* which *encodes* the *data*, the *data encoded* comprises a *systematic part* and a *non-systematic part*; a determiner at least adapted to receive indications of channel conditions of each channel ... a *data assignor* coupled to said determiner to receive indications of determinations made thereat, said assignor for *assigning* the *systematic part* of the *data encoded* by the *encoder* to at least one of the first and at least second transmit antenna transducers that exhibits better channel qualities.”

Applicant respectfully submits that Varshney does not teach or suggest all of the above features of claim 1. In contrast to claim 1, Varshney relates generally to radio-telephones and radio telephone systems that employ retransmission techniques such as incremental redundancy. (paragraph [0004]) In rejecting independent claim 1, the Examiner relies on paragraph [0050] of Varshney. (See pgs. 2-3 of the Office Action) Particularly, the cited portion of Varshney, at best, discloses selection of a code rate in accordance with a channel performance model for estimating channel conditions. Varshney, at best, explains that after a code rate is selected, information data is encoded and assigned to an assignment carrier and then encoded data is transmitted. (paragraph [0050] and particularly Steps 7B3, 7B6 and 7B4 of FIG. 7B of Varshney) In contrast to claim 1, Applicant submits that nowhere in the cited portion (or any other portion of Varshney) is there any mention, teaching or suggestion relating to “an *encoder* which *encodes* the *data*, the *data encoded* comprises a *systematic part* and a *non-systematic part*,” as required by claim 1. Rather, the cited portion, (and indeed all of Varshney) at best, discloses that the encoder disclosed therein encodes “information data.”

(See paragraph [0050]) Nowhere in Varshney, however, is there any teaching or suggestion (and the Examiner cites to none) that the encoder disclosed therein also encodes non-systematic data, as required by claim 1. Given that Varshney fails to teach or suggest an encoder which encodes data comprising a non-systematic part and a systematic part, contrary to the Examiner's general assertion, Applicant also submits that Varshney fails to teach or suggest "a data assignor coupled to said determiner to receive indications of determinations made thereat, said assignor for *assigning the systematic part of the data encoded*," which comprises a *systematic part and a non-systematic part* "by the encoder to at least one of the first and at least second transmit antenna transducers that exhibits better channel qualities," as required by claim 1. Applicant submits that nowhere in Varshney is there any teaching or suggestion relating to any assignor disclosed therein which assigns a part of data encoded by an encoder (disclosed therein) consisting of a systematic part and a non-systematic part, as required by claim 1. Instead, Varshney, at best discloses "encod[ing] and assign[ing] the information data to the assignment carrier."

Additionally, the cited portion of Varshney, at best, discloses that after the information data is assigned to the assignment carrier "[s]tep 7B5 determines if another carrier is available" and "[i]f affirmative, a new code [rate] is selected by step 7B7 in accordance with the previously selected code channel performance model" and Varshney describes that "the encoding and assigning loop continues until" a determination is made that "no more carriers are available" and "then [step 7B4] transmits the encoded data." (paragraph [0050]) Contrary to the Examiner's assertion, nowhere in this portion (or any other portion of Varshney) is there any teaching or suggestion relating to the assignment carrier (alleged claimed assignor) "assigning a systematic part of the data encoded by the encoder (i.e., encoded data comprising a systematic part and a non-systematic part) to at least *one* of the *first and at least second* transmit *antenna transducers* that *exhibits better channel qualities*," as required by claim 1. Nowhere in Varshney is there any teaching or suggestion that the "assignment carrier" disclosed therein assigns the "information data" to one of first and second transmit antenna transducers which exhibits a better channel quality, as required by claim 1. Rather, Varshney, at best, discloses that when the determination is made that "no more carriers are available" then the encoded data is transmitted." (See *id.*)

For at least the foregoing reasons, Varshney does not teach or suggest all of the features of claim 1. Applicant therefore respectfully requests the Examiner to reconsider and withdraw the § 102(a) rejection of claim 1 and its dependent claims 2, 3, 5, 9 and 10.

Since claim 15 contains features that are analogous to, though not necessarily coextensive with, the features recited in claim 1, Applicant submits that claim 15 and its dependent claim 20 are patentable at least for reasons analogous to those submitted for claim 1.¹

Applicant notes that on page 2 of the Office Action the Examiner appears to reject claims 4, 6, 14 and 16-18. However on page 5 of the Office Action, the Examiner points out that claims 4, 6, 14 and 16-18 contain features that are allowable. Since the Examiner only provides reasons for the rejection of claims 1, 2 and 15 under § 102(a) in light of Varshney (See pgs. 2-3 of the Office Action) Applicant takes the § 102(a) rejection of claims 4, 6, 14 and 16-18 to be a clerical error. To the extent that the Examiner is rejecting claims 4, 6, 14 and 16-18 under § 102(a), Applicant respectfully requests the Examiner to provide specific reasons (citing to columns and line numbers in Varshney) for the rejection in the next Office communication.

II. Rejection of Claims 3 and 20 Under 35 U.S.C. § 103(a)

Claims 3 and 20 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Varshney et al. and further in view of Kuchi et al. (U.S. Patent No. 6,185,266; hereinafter “Kuchi”). Applicant respectfully traverses this rejection for at least the following reasons.

As discussed above, Varshney is deficient vis-à-vis independent claims 1 and 15 and Kuchi does not make up for the deficiencies of Varshney. As such, claims 3 and 20 are patentable at least by virtue of their respective dependencies from claims 1 and 15. Applicant therefore respectfully requests the Examiner to reconsider and withdraw the § 103(a) rejection of dependent claims 3 and 20.

III. Rejection of Claims 5, 9 and 10 Under 35 U.S.C. § 103(a)

Claims 5, 9 and 10 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Varshney et al. and further in view of Kim et al. (U.S. Patent No. 7,016,658; hereinafter “Kim”). Applicant respectfully traverses this rejection for at least the following reasons.

¹ Applicant notes that dependent claims 16-19 are indicated to contain allowable subject matter. (See pg. 5 of the Office Action)

Appl. No.: 10/669,128
Amdt. dated June 29, 2007
Reply to Office Action of March 29, 2007

As discussed above, Varshney is deficient vis-à-vis independent claim 1 and Kim does not make up for the deficiencies of Varshney. As such, claims 5, 9 and 10 are patentable at least by virtue of their dependency from claim 1. Applicant therefore respectfully requests the Examiner to reconsider and withdraw the § 103(a) rejection of dependent claims 5, 9 and 10.

IV. Conclusion

In view of the foregoing remarks, Applicant respectfully submits that all of the claims of the present application are in condition for allowance. It is respectfully requested that a Notice of Allowance be issued in due course. Examiner File is encouraged to contact Applicant's undersigned attorney to resolve any remaining issues in order to expedite examination of the present application.

It is not believed that extensions of time or fees for net addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fee required therefore (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 16-0605.

Respectfully submitted,



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ELECTRONICALLY FILED USING THE EFS-WEB ELECTRONIC FILING SYSTEM OF THE UNITED STATES PATENT & TRADEMARK OFFICE ON JUNE 29, 2007.